CONTENTS VOLUME 41

NUMBER 1

The creeping water bugs (Hemiptera: Naucoridae) of Texas. *Jack R. Davis* 1

Germination, light requirements, and competitive interactions of *Stipa leucotricha* (Gramineae). *James J. White and O. W. Van Auken* 27

A systematic review of the Mexican frog *Rana megapoda* Taylor (Anura: Ranidae). *Robert G. Webb* 35

Genetic variability in pre- and post-bottleneck segments of the cui-ui (Osteichthys: *Chasmistes cujus*) population of Pyramid Lake, Nevada. *Hugh B. Britten and Peter F. Brussard* 43

Coyote visitations to experimentally-placed deer carrion. *Eric W. Hein and William F. Andelt* .. 48

Differential use of roadside fencerows and contiguous pastures by small mammals in southeastern Oklahoma. *Bryon K. Clark, Brenda S. Clark, Walter E. Munsterman, and Todd R. Homerding* 54

Notes

New southernmost record of the Asiatic clam *Corbicula fluminea* (Bivalvia: Corbiculidae), in Mexico. *Roberto Torres-Orozco B. and Emilio Revueltas-Valle* 60

Food habits of paedomorphic mole salamanders, *Ambystoma talpoideum* (Caudata: Ambystomatidae), from northeastern Arkansas. *Chris T. McAllister and Stanley E. Trauth* 62

Apparent changes in the composition of a community of cnemidophorine lizards (Sauria: Teiidae) in a subtropical Texas forest. *James M. Walker, Mark A. Paulissen, and James E. Cordes* .. 64

The re-discovery of *Brachyrhaphis punctifer* (Poeciliidae). *Camille L. Mojica* 67

Food habits of four benthic fish species (*Etheostoma spectabile, Percina caprodes, Noturus exilis, Cottus carolinae*) from northwest Arkansas streams. *Edward C. Phillips and Raj V. Kilambi* 69

Presence of the endangered desert pupfish (*Cyprinodon macularius*, Cyprinodontidae) in Cienega de Santa Clara, Mexico, following an extensive marsh dry-down. *Scott A. Zengel and Edward P. Glenn* 73

Neosho madtom distribution and abundance in the Spring River. *Chris Wilkinson, David Edds, Joseph Dorlac, Mark L. Wildhaber, Christopher J. Schmitt, and Ann Allert* 78

Interactions between coyotes (*Canis latrans*) and mountain sheep (*Ovis canadensis*). *Vernon C. Bleich* 81

Densities of coyotes at the interface of Saguaro National Monument and Tucson, Arizona. *Mark F. McClure, Norman S. Smith, and William W. Shaw* 83

The big free-tailed bat, *Nyctinomops macrotis*, in Missouri. *LTC Richard M. Pitts, Gary T. Schimmelpfenig, and Jerry R. Choate* 86

Associative learning and the use of cache markers by yellow pine chipmunks (*Tamias amoenus*). *Stephen B. Vander Wall and Edward Peterson* 88

Early estrus in a female Abert squirrel (*Sciurus aberti aberti*). *Sylvester Allred and Gilbert Pogany* ... 90

Range extension of the American beaver, *Castor canadensis*, in Louisiana. *Ruth M. Elsey and Noel Kinler* 91

Karyotype of the white-sided jackrabbit (*Lepus callotis*). *Francisco X. Gonzáles and Fernando A. Cervantes* 93

Biological and ecological aspects of *Microtus oaxacensis* and *Microtus mexicanus*. *Cornelio Sánchez H., Carlos J. Alvarez R., and María de Lourdes Romero A.* 95

Announcements 99

NUMBER 2

Reproductive biology of the lizard *Eumeces copei* (Lacertilia, Scincidae) from the Eje Neovolcanico, Mexico. *Aurelio Ramirez-Bautista, Louis J. Guillette, Jr., Guadalupe Gutierrez-Mayen, and Zeferino Uribe-Peña* 103

A new species of salamander of the genus *Nototriton* (Caudata: Plethodontidae) from Montaña de Santa Bárbara, Honduras. *James R. McCranie and Larry David Wilson* 111
House construction by the southern plains woodrat (*Neotoma micropus*) in southwestern Oklahoma. *Kathleen M. Thies, Monte L. Thies, and William Caire* 116
Behavioral interactions between red imported fire ants (*Solenopsis invicta*) and three rodent species of south Texas. *Katherine A. Lechner and David O. Ribble* 123
Effect of seeding burned lands on the abundance of rodents and leporids on Naval Petroleum Reserve No. 1, Kern County, California. *Mark R. M. Otten and Gary L. Holmstead* 129
Thermal responses of the *Diceroprocta cinctifera* species group (Homoptera: Cicadidae). *Allen F. Sanborn and Polly K. Phillips* 136
Arthropod associates and herbivory on tarbush in southern New Mexico. *T. D. Schowalter* 140
A remarkable new genus and species of Pseudoscorpionida (Syarinidae) from a cave in Arizona. *William B. Muchmore* 145
Wintering bald eagle population and behavior in the middle Rio Grande basin, New Mexico. *Phillip J. Zwank, Billy L. Tarrant, Raul Valdez, and Dennis L. Clason* 149
Effects of green sunfish (*Lepomis cyanellus*) predation on survival and habitat use of plains killifish (*Fundulus zebrinus*). *Samuel C. Lohr and Kurt D. Fausch* 155
Observations on the distribution and movements of Colorado squawfish, *Ptychoceilus lucius*, in the San Juan River, New Mexico, Colorado, and Utah. *Dale W. Ryden and Lief A. Ahlm* ... 161
A perimeter tracing method for obtaining basal cover: Monitoring the endangered sentry milkvetch at Grand Canyon National Park, Arizona. *Peter G. Rowlands and Nancy J. Brian* 169

Notes

Elevational variation in age at maturity in *Sceloporus jarrovi*: An experimental evaluation. *Royce E. Ballinger, Geoffrey R. Smith, and Joseph W. Nietfeldt* 179
Movement ecology and thermal biology of *Bogertophis subocularis* from Texas (Serpentes: Colubridae). *Marlin W. Sawyer and John T. Baccus* 182
Natural history of the black jackrabbit (*Lepus insularis*) from Espiritu Santo Island, Baja California Sur, Mexico. *Fernando A. Cervantes, Sergio T. Alavarez-Castañeda, Bernardo Villa-Ramírez, Consuelo Lorenzo, and Julieta Vargas* 186
First record of the Sierra Madre mantled ground squirrel (*Spermophilus madrensis*; Rodentia: Sciuridae) from Durango, México. *Jorge Servin, Victor Sánchez-Cordero, and Fernando A. Cervantes* 189
Extinct musk ox from western Oklahoma. *Henry Kirkland, Jr. and Julian Hilliard* 190
Species composition of small mammals at an interstate highway interchange. *Thomas W. Haner, Michael P. Moulton, Jerry R. Choate, and Todd R. Redfearn* 192
Fork-tailed flycatcher (*Tyrannus savana*) in Arkansas in January with comments on winter occurrence in North America. *William J. Shepard and Kimberly G. Smith* 194
Prevalence of double wing molt in free-living ruddy ducks. *William L. Hohman* 195
Lectotype designation for *Buteo jamaicensis suttoni*. *Robert W. Dickerman* 198
Red-breasted mergansers (*Mergus serrator*) nesting in southern Texas. *Jeffery R. Rupert and Timothy Brush* 199
Announcements 201

NUMBER 3

Early Pleistocene (Irvingtonian) plants from the Albuquerque area, New Mexico. *Paul J. Knight, Spencer G. Lucas, and Anne Cully* 207
Using remote sensing and spatial information technologies to map sabal palm in the Lower Rio Grande Valley of Texas. *James H. Everitt, Frank W. Judd, David E. Escobar, Mario A. Alaniz, Michael R. Davis, and William MacWhorter* 218
Response of alligator juniper (*Juniperus deppeana*, Pinaceae) to historic environmental variability in south central New Mexico. *Richard A. Earl and Dallas L. Bash* 227

Using strontium and rubidium tracers to characterize nutrient uptake patterns in creosotebush and mesquite. *Mengchi Ho, Rachel E. Roisman, and Ross A. Virginia* 239
Size decline in *Larrea tridentata* (creosotebush). *Richard E. Miller and Laura Foster Huenneke* .. 248
Grazing effects on reproductive characteristics of common curlymesquite (*Hilaria belangeri*). *Elizabeth L. Scholl and Robert J. Kinucan* 251
Pollination biology and the relative importance of nocturnal and diurnal pollinators in three species of Sonoran Desert columnar cacti. *Theodore H. Fleming, Merlin D. Tuttle, and Margaret A. Horner* 257
Removal of piñon seeds by birds and rodents in San Luis Potosí, México. *Ezequiel Martínez-Delgado, Eric Mellink, Juan Rogelio Aguirre-Rivera, and Edmundo García-Moya* 270
Dead and dying Brazilian free-tailed bats (*Tadarida brasiliensis*) from Texas: Rabies and pesticide exposure. *Donald R. Clark, Jr., Amanda Lollar, and Deborah F. Cowman* 275
Estimates of abundance of cetaceans in offshore waters of the northwestern Gulf of Mexico, 1992–1993. *Thomas A. Jefferson* 279
Helminth community structure of *Chirostoma attenuatum* (Osteichthyes: Atherinidae) in two Mexican lakes. *Elsa Espinosa-Huerta, Luis García-Prieto, and Gerardo Pérez-Ponce de León* ... 288
Male mate searching and female availability in the dragonfly, *Libellula saturata*: Relationships in time and space. *S. J. DeBano* 293
Seasonal variation of riffle and pool fish assemblages in a short mitigated stream reach. *Linda Fuselier and David Edds* 299
Foraging patterns of the least tern (*Sterna antillarum*) in north-central Oklahoma. *Sara H. Schweitzer and David M. Leslie, Jr.* 307

Notes

Growth rate and life span of a prickly pear cactus, *Opuntia engelmannii*, in the northern Sonoran Desert. *Janice E. Bowers* 315
Seeds of *Yucca whipplei* var. *whipplei* germinate in the fruit. *Travis E. Huxman and Michael E. Loik* 318
First Holocene record for Preble's shrew (*Sorex preblei*) in New Mexico. *Gordon L. Kirkland, Jr. and James S. Findley* 320
Summer population structure of subalpine bats in Colorado. *Jay F. Storz and Charles F. Williams* 322
The current and historical mussel fauna of the Kiamichi River, Oklahoma. *Caryn C. Vaughn, Charles M. Mather, Mark Pyron, Patricia Mehlhop, and Estelle K. Miller* 325
Thiothrix sp. (Beggiatoaceae) from tadpoles in western Mexico. *Paulette L. Ford and Norman J. Scott, Jr.* 328
Disturbance of wintering green-winged teal and mallards by raptors. *William P. Johnson and Frank C. Rohwer* 331
Announcements 335

NUMBER 4

Effects of water levels and weather on wintering herons and egrets. *Paul J. DuBowy* 341
Breeding biology of the American avocet and black-necked stilt in northern Utah. *Tex A. Sordahl* 348
Prey sizes of male and female northern goshawks. *Clint W. Boal and R. William Mannan* 355
Is *Barisia rudicollis* (Sauria: Anguidae) arboreal? A morphological analysis. *J. Kelly McCoy and Stanley F. Fox* 359
Morphological variation among the Mexican lampreys (Petromyzontidae: *Lampreta*: Subgenus *Tetrapleurodon*. *John Lyons, Oscar J. Polaco, and Philip A. Cochran* 365
Gar ichthyootoxin: Its effect on natural predators and the toxin's evolutionary function. *Kenneth G. Ostrand, Monte L. Thies, Darrell D. Hall, and Mark Carpenter* 375
Factors limiting the distributions of native fishes in the Little Colorado River, Grand Canyon, Arizona. *Anthony T. Robinson, Dennis M. Kubly, Robert W. Clarkson, and Edward D. Creef* ... 378

Spatial genetic variability in the coyote (*Canis latrans*). *John A. Peppers, Phyllis K. Kennedy, and Michael L. Kennedy* 388
A second species of pocket gopher in Arkansas. *Douglas A. Elrod, Gary A. Heidt, Diana M. A. Elrod, Melaney Birdsong, and Earl G. Zimmerman* 395
Persistence of mountain sheep populations in Arizona. *Paul R. Krausman, Richard C. Etchberger, and Raymond M. Lee* 399
Effects of seasonal disking on seed production and invertebrate biomass. *Robert J. Robel, Blake L. Henning, Kevin W. Johnson, Kenneth E. Kemp, and Kevin E. Church* 403
Phytogeographic, taxonomic, and genetic implications of phenotypic variation in the *Ponderosae* of the Southwest. *Gerald E. Rehfeldt, Boyd C. Wilson, Stephen P. Wells, and Richard M. Jeffers* 409
Range extension of *Halimeda incrassata* (Chlorophyta, Bryopsidales): Occurrence in the lower Laguna Madre of Texas. *James E. Kaldy* 419
Numerical analyses of vegetation based on environmental relationships in the southern Chihuahuan Desert. *Pedro Luis Valverde, José Alejandro Zavala-Hurtado, Carlos Montaña, and Exequiel Ezcurra* 424
Effect of an ant-aphid interaction on the reproductive fitness of *Paullinia fuscecens* (Sapindaceae). *Victor Rico-Gray and Gerardo Castro* 434

Notes

Breeding season displays of golden-fronted woodpeckers. *Michael S. Husak* 441
Observations on nesting and display flights of the vermilion flycatcher in western Texas. *Tim J. Archer* 443
Egg carrying by a mottled duck. *Barry C. Wilson and Paul D. Levesque* 444
Waterfowl mortality from castor bean poisoning in northwestern Texas. *Carroll D. Littlefield* .. 445
Fish fauna of the Bavícora Basin, Chihuahua, Mexico. *Jerome A. Stefferud and David L. Propst* .. 446
Ostracods of Texas Playas. *Francis R. Horne* 450
Chromosomal study of the insular San José brush rabbit (*Sylvilagus mansuetus*) from México. *Fernando A. Cervantes, Consuelo Lorenzo, Sergio T. Álvarez-Castañeda, Alejandro Rojas-Viloria, and Julieta Vargas* 455
First record for the kinkajou, *Potos flavus* (Carnivora: Procyonidae) in Tamaulipas, Mexico. *Arnulfo Moreno-Valdez* 457
Anthropogenic extinction of the endemic deer mouse, *Peromyscus maniculatus cineritius*, on San Roque Island, Baja California Sur, México. *Sergio Ticul Álvarez-Castañeda and Patricia Cortés-Calva* 459
Direct and indirect effects of floating vegetation mats on Texas wildrice (*Zizania texana*). *Paula Power* 462
Bulbil production in *Agave* (Agavaceae) and related genera. *Stan R. Szarek, Barbara Driscoll, Cecile Shohet, and Steve Priebe* 465
Minutes of the Board of Governors and Business Meetings: 1996 Annual Meeting of The Southwestern Association of Naturalists 470
Announcements 483
Index to Volume 41 489

Cover: Society Logo by Coral McCallister.

Printed in the United States of America.